Split Measure Phrases and Communication Strategies*

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Abstract

The aim of this paper is to explore the syntactic and semantic properties of split classifier phrases (ClPs) and amount phrases (AmPs) constructions in Korean as a source of communication strategy of Korean learners of English. Syntactically both ClPs and AmPs can be separated from their host noun. Semantically, they are subject to the monotonicity constraint. However, the relationship between a ClP and its host noun is different from the relationship between an AmP and its host noun. The choice of a ClP is dependant on its host noun, while the choice of an AmP is determined by semantic compatibility. This difference has some impact in the syntax in terms of case morphology. In passives and unaccusatives, AmPs can bear either nominative or accusative case morphology, while ClPs must bear nominative case morphology. These split ClP and AmP structures are frequently employed by Korean learners of English. By using them, Korean learners of English achieve the goal of communication. Since this type of

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transferring a particular structure as a source of a communication strategy is likely to be overlooked, more attention should be given to the syntactic and semantic properties of that structure used by Korean learners of English.

Key words: Measure Phrase, Classifier Phrase, Amount Phrase, split MP structure, measure function, event argument, homomorphism, agreement, accusative case morphology, communication strategies, L1 transfer

I. Introduction

It is generally believed that Korean learners of English show some transfer effects in their production of English. For instance, Shin (2000) reports that the following utterance is often produced by high school students.

(1) Family is five person.
'As for the family, it consists of five people.'
Shin (2000; 111. (89b))

The Korean counterpart of (1) in (2) clearly shows the similarities between the Korean and the uttered sentence in (1).

(2) Kacok-i tases myeng-i-ta.
family-nom 5 CL_{person}-be-decl
'The family consists of 5 people.'

The direct reflection of the learners' native language of this type is related to split measure phrase

constructions. Measure phrases (henceforth MPs) are used to express amount in noun phrases. Languages like Korean use classifier phrases (e.g., two classifier in (3a); ClPs) and amount phrases (e.g., three kilograms in (3b); AmPs) for this purpose.[1)]

(3) a. Yoda-ka sakwa-lul ecey **twu** **kay** mek-ess-ta.
Yoda-nom apple-acc yesterday 2 Cl_{unit} eat-past-decl
'Yoda ate two apples yesterday.'

b. Yoda-ka sakwa-lul ecey **sam** **kilo** mek-ess-ta.
Yoda-nom apple-acc yesterday 3 kilogram eat-past-decl
'Yoda ate three kilograms of apples yesterday.'

As shown above, these MPs (Classifier Phrases and Amount Phrases) can be separated from the nouns that they modify, forming split MP constructions. It has been argued that Split MPs must be c-commanded by their host nouns (Bobaljik 1995, Doetjes 1997, Downing 1996, Junker 1995, Nakanishi 2004, Sportiche 1988, among others). It also has been claimed that there is no derivational relation between the Floating/Split pattern and other possible patterns such as the genitive pattern.

Unlike Korean, English allows a limited range of split MP constructions. Only certain quantifiers are allowed to be separated from their host noun such as *all*, *both*, *each*.

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1) The markers *-i* and *-ka*, *-ul* and *-lul* alternate depending on their phonological environments: *-i* and *-ul* are used after a consonant and *-ka*, and *-lul* after a vowel. Abbreviations: nom=nominative; acc=accusative; past=past tense; decl=declarative marker; pass=passive

(4) a. Three of my friends came into the café **all** very drunk.
b. She called the men **both** bastards.
c. The tooth fairy promised the kids **each** a quarter.
(Boblaljik 2003).

This cross-linguistic difference in the range of split MP constructions results in the negative transfer in the early stage of interlanguage, as shown in (1). Advanced learners seem to overcome the effects of negative transfer. Nevertheless, the following type of utterance is frequently observed.[2)]

(5) a. I want to have beer, 2 bottles.
b. We went to the stores, 3 places.
c. I need money, a lot.

Korean learners of English show a great tendency to use a sentence structure like the one in (5). In addition, the utterances are accepted by a native speaker in the discourse contexts. Therefore, learners' employing the split MP structure in their production rather than the genitive pattern like 3 bottles of beer can be considered communication strategies. Indeed, this strategy serves well for the learners' purpose. By using the split MP structure frequently and by avoiding a genitive pattern, learners may be fluent in English strategically. However, this strategy can also do harm to learners' accurate production, since the strategy involves transfer of the split MP structure and avoidance of using complex DP structure. The aim of this paper is to reveal the

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2) These utterances are based on the observations of Korean students who attend the English Language Institute at the University of Delaware.

syntactic and semantic properties of the source of this communication strategy.

This paper is organized as follows. Section 2 will show that the semantic properties of classifier phrases and amount phrases. I further show that classifiers are different from amount expressions. The difference results in the different syntactic behavior between ClPs and AmPs in constructions that involve DP movement such as passives and unaccusatives. In section 3, I propose that a ClP must agree with its host DP in syntax, while an AmP need not agree. I will show that the case morphology on MPs is related to the position where they occur under the structure of the Split MP constructions proposed in this paper. The positional difference, under the phase based syntactic theory, accounts for the difference in the case morphology on MPs. In section 4, the speaker variation of AmPs with case morphology will be discussed in terms of the lack of agreement and disagreement between an AmP and its host noun. Section 5 will conclude the paper with pedagogical implications.

II. The Semantics and Case Morphology of Split Measure Phrases

This section explores the semantic and syntactic similarities and differences between ClPs and AmPs. Following this, the syntactic structure that provides two distinct positions for MPs with case morphology will be presented.

A. The Semantic Similarities between ClPs and AmPs

Since MPs are separated from their host noun, it might be fair to assume that split MPs are generated separately from their host noun. Thus it would be challenging to come up with the way to compute the denotation of split MP constructions. Recently, Nakanishi (2003, 2004) proposes a semantics to interpret the split MP constructions using a homomorphism. Homomorphisms enable us to equate the indirect measurement of the target with the intended measurement of the target. For instance, Archimedes measured the volume of a crown by measuring the water spilled out from the container, and by equating the amount of the spilled water with the volume of the crown. Similarly, using a homomorphism in (6), Nakanishi claims that MPs indirectly measure the host noun by measuring out the event denoted by the verb, since the split MP cannot measure its host noun directly.

(6) The indirect measure function μ' is monotonic relative to the domain E iff: For events e_a, e_b in E: If $h(e_a)$ is a proper subpart of $h(e_b)$, then $\mu'(h(e_a)) < \mu'(h(e_b))$, where h is a homomorphism from E to I such that $h(e_1 \cup_E e_2) = h(e_1) \cup_I h(e_2)$
(h: homomorphism, μ: measure function E: event I: Individual)
(Nakanishi 2003)

Using an event argument (Davidson 1967) and lattice structures of events (Landman 2000, Link 1983, Krifka 1989), the homomorphism connects the semantic parallelism between the nominal and verbal domains. In (3), the homomorphism relates the measurement of the

eating-apple-event to the relevant domain of the nominal domain such as cardinality of individuals or the weight of the individuals. The sentence (3a), thus, is interpreted such that there is a plural event e of Yoda's eating x such that x is an apple/apples and μ: cardinality of individuals applied to h(e) yields an interval on the cardinality of individuals' scale that has the property [|two individuals|], where h is [|eat|].

This parallelism also captures the fact that Split MPs in each nominal and verbal domain are subject to the same monotonicity constraint in (7).

(7) μ is monotonic relative to domain I iff:
For individuals x, y in I:
If x is a proper subpart of y, then $\mu(x) < \mu(y)$
(Schwarzschild 2002)

Schwarzschild (2002) claims that a measure function is monotonic relative to the denotation of some element if and only if it tracks part whole structures of the element. For instance, in the AmP, *sam kilo* '3 kilogram' in (3b), there is a function that gives kilogram measurements and it "is monotonic because if **a** is part of **b** and **a** weighs **n** ounces and **b** weighs **m** ounces, then **n** is less than **m**" (Schwarzschild, 2002; 3). Therefore, *sam do* '3 degree' can be used to measure out the temperature in (8b), because of the measure function μ: Degree is monotonic to [|temperature|], but it cannot be used to measure out water in (8a), because of the measure function μ: Degree is not monotonic to [|water|]. The relevant measure scheme for water is 'weight' or 'volume', rather than 'degree'.

(8) a. *Mwul-i cinan pam-ey **sam do** nemchi-ess-ta.
water-nom last night-at 3 degree overflow-past-decl
'The water overflowed by 3 degrees last night.'

b. Kion-i cinan pam-ey **sam do** ol-ass-ta.
temperature-nom last night-at 3 degree increase-past-decl
'The temperature increased by 3 degrees last night.'

Thus, split ClPs and AmPs form a natural class in semantics, and behave like VP adverbials in syntax. The relation between a classifier and its host DP, however, is different from the relation between an amount expression and its host DP such that a classifier and its host DP have a closer relation than an amount word and its host DP do. This difference has a syntactic impact with respect to case morphology in Korean.

B. The Structure of Split MP Constructions

ClPs and AmPs can bear case morphology. Thus, in an ordinary transitive clause, an internal argument-oriented ClP bears accusative case morphology, and an external argument-oriented ClP bears nominative case morphology, as in (9).

(9) Haksayng-tul-i twu myeng-i chinkwu-tul-ul ney myeng-ul
student- pl-nom 2 Cl_{person}-nom friend-pl-acc 4 Cl_{person}-acc
man-ass-ta.
meet-past-decl
'Two students met four friends.'

AmPs, just like ClPs, can bear case morphology. An internal argument-oriented AmP can bear accusative case morphology, and an external argument-oriented AmP can bear nominative case morphology, as shown in (10).

(10) Kangmwul-i samsip thon-i kangttuk-ul sip mithe-lul
river.water-nom 30 ton-nom river.bank-acc 10 meter-acc
mwunettuli-ess-ta.
break.down-past-decl
'30 tons of water broke down 10 meters of the bank.'

Another property that Split ClPs and AmPs share is that they must be c-commanded by their host noun. As shown below, non-c-commanding potential antecedents cannot be a host DP for Split MPs.

(11) a. Leia-ka [ai$_i$-tul-euy chinkwu$_j$-lul] twu$_{*i/j}$ myeng-ul man-ass-ta.
Leia-nom child-pl-gen friend-acc 2 Cl$_{person}$-acc meet-past-decl
'Leia met two friends of the children.'
*'Leia met friends of the two children.'

b. Leia-ka [sakwa$_i$-euy kkepcil$_j$-ul] sam$_{*i/j}$ kilo-lul mek-ess-ta.
Leia-nom apple-gen peel-acc 3 kilogram-acc eat-past-decl
'Leia ate 3 kilograms of peel of the apple.'
*'Leia ate peel of 3 kilograms of the apple.'

The examples so far show that ClPs and AmPs behave similarly in the syntax, and thus, it is fair to assume that they have similar syntactic representations. An immediately following question is how the split MP structure is represented in the syntax. There has been a general consensus that a Split MP associated with an external argument and a Split MP associated with an internal argument are at different locations with some variations among researchers with respect to the exact location (Fujita 1994, Kim, Sun-Woong 1996, Miyagawa 1989, Nakanishi 2003, Sohn, Keun-Won 1993, among others). The placement of VP adverbs supports this claim that there are two different positions for MPs. For

instance, external argument oriented ClPs cannot occur below VP adverbs such as *caymisskey* 'interestingly'.

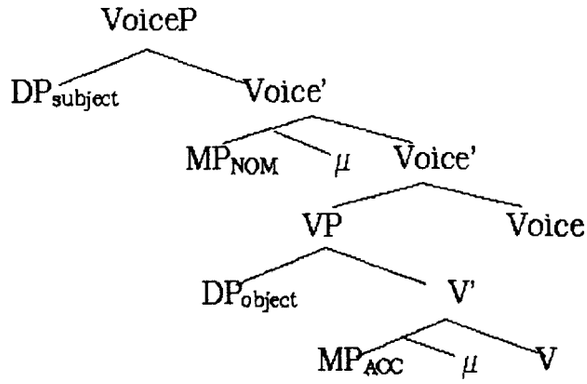
(12) a.*Haksayng-i *caymisskey* twu myeng-i chayk-ul ilk-ess-ta.
student-nom with.interest 2 Cl_{person}-nom book-acc read-past-decl
'2 Students read the book with interest.'
b. Haksayng-i twu myeng-i *caymisskey* chayk-ul ilk-ess-ta.
student-nom 2 Cl_{person}-nom with.interest book-acc read-past-decl

The ungrammatical sentence in (12a) shows that external argument-oriented ClPs cannot occur in a position below the position that VP adverbs occupy. The internal argument oriented ClP in (13), in contrast, occurs in a position lower than the VP adverb.

(13) Haksayng-i *caymisskey* chayk-ul twu kwen-ul ilk-ess-ta.
student-nom with.interest book-acc 2 Cl_{book}-acc read-past-decl
'Students read 2 books with interest.'

Now it is clear that the position where external-argument-oriented MPs occur is distinct from the position that internal-argument-oriented MPs occupy. Let us suppose that external-argument-oriented ClPs are generated outside VP and internal-argument-oriented ClPs are generated inside VP. This hypothesis, then, has the syntactic representation for Split MPs illustrated below, in which split MPs are c-commanded by their host DPs.

(14)



In (14), an external argument is introduced by the functional head, Voice (Kratzer 1996)[3], and the related MP is generated within the projection of Voice. The internal argument is generated in the specifier position of VP and the related MP is generated within the domain of VP. The measure function μ in (14), which is a measurement scheme obtained from the relation between an MP and a measured element (Nakanishi 2004), is not present in the syntax but combines with the MP in the semantics. The structure in (14) contains the semantic measure function for illustrative purposes.

To summarize, split ClPs and AmPs behave similarly in the syntax. They can bear case morphology and their syntactic representations are similar. In the syntactic representation, two distinct positions are available for MPs. The external argument oriented MPs occupy a position outside the domain of a VP, and the internal argument oriented MPs occupy a position within the domain of a VP.

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3) For Chomsky (1995), it is the light verb, *v*.

C. ClPs are different from AmPs

Amount expressions and classifiers are used to quantify a certain domain of entities. In this respect, amount words are similar to classifiers. However, classifiers and amount expressions are different.

Classifiers form a closed set and each classifier refers to an atomic discrete entity with specific properties such as a particular shape, human, non-human, etc. (Cheng and Sybesma 1992, Chierchia 1998a, Chierchia 1998b, Downing 1996, Krifka 1986, Krifka 1989, Lønning 1987, among others). For instance, *myeng* is used to count the number of humans, *mali* for the number of animals, *kay* for the number of inanimate objects and so on. Therefore, the relationship between a classifier and its host noun is arbitrary and the choice of a classifier is dependent upon the host noun (Krifka 1986, 1989).

Amount expressions, in contrast, measure out a certain domain of entities, based on some properties, such as length, weight, volume, degree etc. (Schwarzschild 2002). Since the measure function of AmPs is somewhat independent from the host noun (Krifka 1986, 1989), AmPs apply to an entity that is compatible with them. For instance, an AmP, kilogram, can be used in reference to any entity that has weight measurable by kilograms. Since the choice of an amount phrase is independent from its host noun, the relationship between them is not closer than that of a classifier and its host noun.

This different dependancy relation between a ClP and an AmP has an effect in syntax in terms of case morphology. In sentences involving DP movement such as unaccusatives, and passives, ClPs must bear the same

case morphology as their host noun, as shown in (15), while AmPs can bear either *-ka* or *-lul*, as in (16).[4]

(15) a. Elum-i **twu cokak-i / *twu cokak-ul** el-ess-ta.
ice-nom 2 Cl_{piece}-nom / 2 Cl_{piece}-acc freeze-past-decl
'Two pieces of ice were frozen.'
b. Kaykwuri-ka **twu mari-ka /*twu mali-lul** cap-hi-ess-ta.
frog-nom 2 Cl_{animal}-nom/ 2 Cl_{animal}-acc catch-pass-past-decl
'Two of the frogs were caught.'

(16) a. Elum-i **sip inchi-ka /sip inchi-lul** el-ess-ta.
ice-nom 10 inch-nom/10 inch-acc freeze-past-decl
'The water froze 10 inches thick.'
b. Ttang-i **sam mithe-ka /sam mithe-lul** pha-i-ess-ta.
ground-nom 3 meter-nom/3 meter-acc dig-pass-past-decl
'3 meters of the ground were dug.'

In (15) and (16), when the internal argument moves to the subject position, ClPs must bear nominative case morphology, while the AmPs can bear either nominative or accusative case morphology. This contrast demonstrates that ClPs are different from AmPs.

To summarize, classifier phrases behave differently from amount phrases. The relationship between a ClP

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4) There are speakers who do not like the *-lul* marked measure phrases in passives and unaccusatives. One of the reviewers mentioned that the sentences in (16) are marginal to him/her, and the sentence in (16a) is acceptable with a focus-related interpretation. However, I could not able to determine what are the factors to draw the different judgments for the sentences in (16). These differences in judgement cannot be attributed to regional dialects, sociolects, or the formality of utterances, since there is no correlation between the two groups of speakers who accept an AmP with accusative case morphology and those who do not. Also see Section III.

and its host noun is much closer than that of an AmP and its host noun. This difference can be overtly realized as case morphology. ClPs, if they bear case morphology, must bear the same case morphology as their host DP, while AmPs can bear mismatching case morphology in passives and unaccusatives. To account for this differing behavior with respect to case morphology, I argue that case morphology on MPs is a position indicator where they occur in a sentence. Furthermore, I argue that ClPs are in an agreement relation with their host noun, while AmPs are not.

III. The Agreement Relation

An AmP exhibits an alternation in case morphology in passives and unaccusatives, while a ClP does not. I argue that this presence/absence of the alternation in case morphology comes from a difference with respect to agreement between an MP and its host noun. Mismatching case morphology shows this difference between a ClP and an AmP.

Matching case morphology does not indicate that there is an agreement relation, since case morphology on MPs marks the position of MPs. The mismatching of case morphology, in contrast, is significant. As shown in (17), ClPs and AmPs show a sharp contrast when they bear accusative case morphology. A ClP cannot have mismatching case morphology with its host noun, while an AmP can.

(17)

Host DP in passives/unaccusatives	case morphology on MP	
Host-nom	√ClP-nom	***ClP-acc**
	√AmP-nom	√AmP-acc

If case morphology does have any indication, it shows where the syntactic unit occupies in a sentence. Accusative case morphology indicates that the element with accusative case morphology is in the domain of a VP, and nominative case morphology shows that the syntactic unit bearing it occupies a position outside the domain of a VP (Sim 2005). Thus, the mismatch of case morphology shows that the MP and its host DP are in different domains. The host DP moves to the subject position in passives and unaccusatives, and becomes nominative. If we assume that accusative case morphology is morphological default within the domain of a VP, as argued in Sim (2005), the nominative host and the accusative MP are not in the same domain. Therefore, mismatching case morphology shows that a ClP requires its host to be in the local domain, while an AmP does not. I show in the following discussion that this locality is related to agreement, and thus, argue that the mismatching case morphology indicates whether the agreement relationship is established or not. More specifically, an AmP is not in an agreement relation with its host DP, while a ClP is in an agreement relationship with its host DP. This agreement relation between a ClP and its host DP prohibits the ClP from bearing mismatching case morphology. An AmP, in contrast, allows the mismatching case morphology due to the lack of agreement.

Why does a ClP require a local relation? As noted earlier, the choice of a classifier is dependent on its host

noun. This dependency and the locality requirement provide a firm basis to assume that a ClP and its host DP are in an agreement relation. Suppose that a classifier has a formal feature [F] which agrees with the host DP, similar to morphological agreement between host DP and a floating quantifier observed in languages like French, German, and Hebrew. The feature that a classifier has can be a phi-feature set. Among the features [person], [number] and [gender], it is plausible to posit the [number] feature on a classifier that agrees with its host noun, since a ClP contains a numeral and quantifies the host DP indirectly. The [gender] feature is also plausible in a classifier. In many languages of various families (Niger-Congo, Caucasic, Sino-Tibetan, Oceanic, Australian, Amerindian, etc.), nominal items are formally divided by diverse means, according to criteria that have to do either with "natural" categories such as being a human (of either sex), or a plant, or an animal, or a dangerous thing, or with descriptive properties of the denoted object, like being elongated, or flat, or liquid, and so forth. Even though there are differences between noun classification and classifiers (Dixon 1986), the intuitive idea is that the noun classification and classifiers are related to each other with respect to a certain feature. I will use this feature [gender] for the sake of simplicity. If a classifier agrees with its host noun in [number] and [gender], then the mismatch in case morphology shows that there is a failure of agreement.

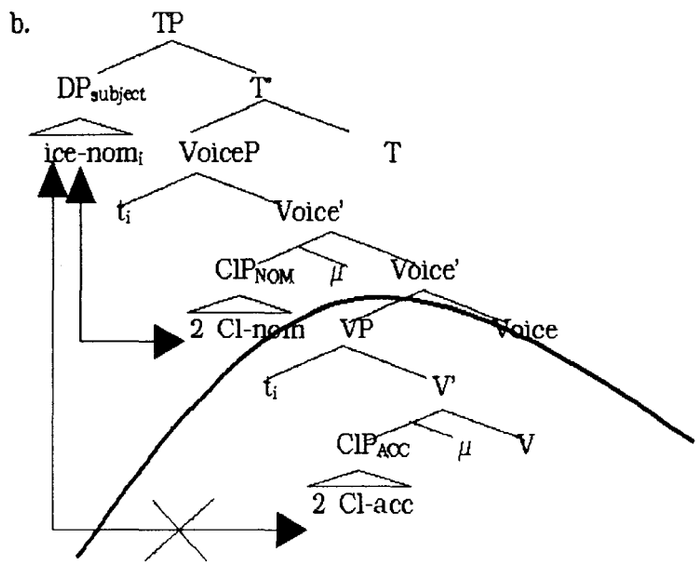
The fact that MPs have case morphology indicates that they are generated in a certain position where the proper case morphology is available, i.e., inside VP and outside VP. In passive and unaccusative constructions, a

ClP and its host DP must have identical case morphology, while an AmP can bear either nominative or accusative case morphology. Since accusative and passive VPs are phase (Legate 2003, Sim 2005), the host DP, which is the surface subject of passive and unaccusative predicates, cannot agree with a ClP within the domain of a VP. Unlike a ClP, an AmP allows the *-ka/-lul* alternation, since it does not agree with its host DP.

Since unaccusatives have the non-active Voice head (Kratzer 1996), the sentence in (15a) has the following structure.

(18) a. Elum-i twu cokak-i / *twu cokak-ul el-ess-ta. (=15a)
ice-nom two Cl_{piece}-nom / two Cl_{piece}-acc freeze-past-decl
'Two pieces of ice were frozen.'

b.



There are two positions where a ClP can be generated, as shown in (18b). However, only one of the positions is available for a ClP in unaccusatives and passives. Due to the presence of VoiceP, unaccusative and passive VPs are subject to the Phase Impenetrability Condition (PIC).[5]

(19) *Phase Impenetrability Condition (PIC)*
In phase with head H, the domain of H is not accessible to operations outside, only H and its edge are accessible to such operations.

(Chomsky 2000:108)

The PIC allows XPs in the specifiers and adjuncts (i.e., edge) of phases, as well as their heads, to remain visible to further syntactic operations. Therefore, the PIC allows the ClP in the VoiceP to be in an agreement relation with its host noun in the subject position. In (18b), the internal argument, *elum* 'ice', moves to the phase edge before the unaccusative VP is spelled out. The nominative ClP, *twu cokak-i* '2 Cl_{piece}-nom', which is generated within VoiceP, is at the edge of a phase, and thus, successfully agrees with its host DP, *elum* 'ice'. In contrast, the accusative ClP, *twu cokak-ul* '2 Cl_{piece}-acc', is in the domain of a VP and its host DP is outside of the phase. Consequently, the ClP cannot agree with its host DP, *elum* 'ice' due to the PIC.

One might consider the possibility that the trace (i.e., copy) of the internal argument within VP agrees with the accusative ClP. In principle, it is possible. However, if we

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5) In Chomsky's system (1995, 2001), syntactic elements enter the derivation with uninterpretable features, which must be deleted prior to the derivation being sent to the interfaces (the conceptual-intentional interface and the perceptual-articulatory interface). The output of the syntax is sent to the interfaces in stages. Each stage is called a phase (for Chomsky, *v*P, CP, and possibly DP), and the operation that sends the output to the interfaces is called Spell-Out. At the point of Spell-Out, the complements of the phase defining heads are sent to each of the interfaces. The head and the edge of the phase are accessible to later syntactic operations, but the domain is not, resulting in the Phase Impenetrability Condition.

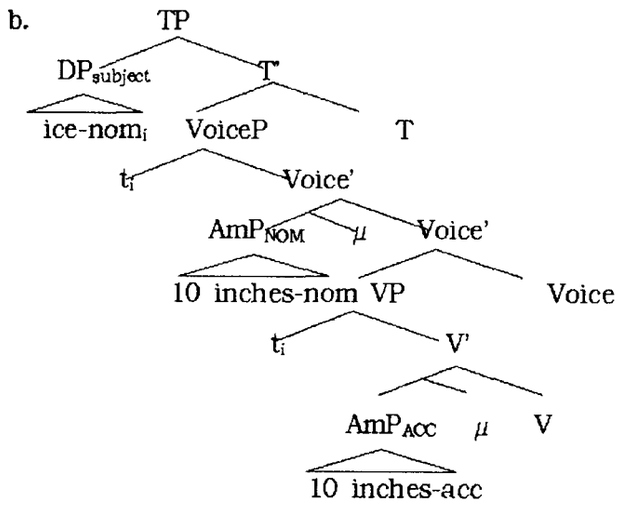
follow Frampton and Gutmann's (2000, 2001) proposal that syntactic agreement is feature sharing, the accusative ClP and the chain formed by movement of the host DP, ice, share the same case feature. Apparently, the ClP has different case morphology from its host DP, indicating that syntactic agreement is not established.

A ClP agrees with its host DP with respect to the number and gender features in syntax, and syntactic agreement results in feature sharing between the two syntactic objects in the agreement relation. Two different positions are available for a ClP to occur in, and, thus, the agreement relation between a ClP and its host is established without resorting to any type of movement of the ClP. Since passive and unaccusative VPs are subject to the PIC, and the internal argument moves the subject position, the ClP in the VoiceP successfully establishes an agreement relation with its host DP, while the ClP within VP cannot. Consequently, the ClP must bear nominative case morphology.

An AmP, unlike a ClP, is not in an agreement relationship with its host noun in the syntax. The lack of agreement allows an AmP to bear mismatching case morphology, as in (16a), repeated as (20).

(20) a. Elum-i sip inchi-ka / sip inchi-lul el-ess-ta.
ice- nom 10 inch- nom 10 inch-acc freeze-past-decl
'The water froze 10 inches thick.'

b.



If an AmP has to be in an agreement relation with its host DP, it is predicted that the AmP with accusative case morphology is not allowed. This prediction is not borne out. The AmP, *sip inchi* '10 inches' in (20), shows the *-ka/-lul* alternation. The nominative AmP is at the phase edge, and thus it does not cause any problem. In contrast, the accusative AmP is in the VP domain. After VoiceP is constructed, the VP undergoes Spell-Out. Due to the PIC, the AmP within VP is not visible to further syntactic operations. Thus, if an AmP must agree with its host DP, the AmP must be at the phase edge, allowing the nominative AmP only. However, this is not the case. Therefore, an AmP does not require an agreement relation with its host DP in syntax. Since it combines with a compatible DP in semantics, it can occur outside or within VP, exhibiting the *-ka/-lul* alternation.

IV. The Lack of Agreement and Disagreement of AmPs

The discussion concerning AmPs so far is based on the alternation of case morphology in passives and unaccusatives. I claimed that an agreement relationship is not required between an AmP and its host DP, based on mismatching case morphology.

However, it is not true that all Korean speakers allow this alternation in passives and unaccusatives, as shown in (16). While there is no variation in the judgments with the accusative AmP in the ordinary transitive sentences, some speakers do not allow AmPs with the accusative case morphology i.e., *-lul*, in passives and unaccusatives. For those speakers, the sentences with the accusative AmPs in (16) are ungrammatical, while those with the nominative AmPs are perfectly acceptable.[6]

To make the situation complicated, both groups of speakers allow null case morphology, as shown in (21).

(21) a. Elum-i sip inchi el-ess-ta.
ice-nom 10 inch freeze-past-decl
'The water froze 10 inches thick.'
b. Ttang-i sam mithe pha-i-ess-ta.
ground-nom 3 meter dig-pass-past-decl
'3 meters of the ground were dug.'

As summarized in (22), the difference between the

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6) It is not clear what factor(s) cause(s) the difference in judgment. Thus, I refer to the group of Korean speakers who allow the accusative case morphology on AmPs as Dialect A, and the group who do not allow as Dialect B.

two dialects comes from the accusative case morphology in passives and unaccusatives. Dialect B does not tolerate the mismatching case morphology on AmPs, while it allows matching case morphology, and null case morphology. Dialect A, on the other hand, allows the mismatching case morphology on AmPs, as well as matching and null case morphology. Neither dialect, however, allows mismatching case morphology on ClPs.

(22)

	Nominative Host DP in passives/unaccusatives	Case morphology on AmP		
a.	Dialect A	√AmP-∅	√AmP-nom	√AmP-acc
b.	Dialect B	√AmP-∅	√AmP-nom	*AmP-acc
c.	Dialect A/B	√ClP-∅	√ClP-nom	*ClP-acc

At first glance, the situation of Dialect B (22b) is similar to that of ClPs (22c). Based on the surface similarity, one might consider that the AmPs with case morphology are ClPs in Dialect B. Given the semantic differences between AmPs and ClPs we have seen so far, this would mean that Dialect B ignores them. Although such a possibility cannot be dismissed as utterly impossible, I find it neither plausible nor desirable.

Alternatively, we may consider the possibility of viewing an agreement relation as a three-way distinction: agreement, lack of agreement, and disagreement. There are cases in which the grammatical/ungrammatical distinction depends on the surface realization in a situation where agreement apparently fails. If a sentence lacks agreement, a default form emerges, and the sentence becomes grammatical. However, if a sentence

involves a form that is neither an agreeing form nor a default form, it is ungrammatical. This is a case of disagreement.

For instance, in Belfast English, unlike Standard English, a plural subject optionally agrees with a verb in number, while a singular subject must agree in number.

(23) a. These cars goes/go very fast.
b. The eggs is/are cracked.

(Henry 1995)

Henry (1995) argues that the sentences in (23) show two agreement patterns: agreement, and lack of agreement. When the agreement relation is established, the verb does not have the third person singular suffix. In addition, Belfast English allows lack of agreement, and thus, the verb has the third person singular suffix, which is default. In contrast, if the subject is singular, the verb must be marked with the third person singular suffix.

(24) a. *This car go very fast.
b. *The egg are cracked.

The ungrammatical sentences in (24) show that the occurrence of the third person singular suffix in Belfast English is not a free choice. Since the absence of *-s* is not default, this cannot be a case of lack of agreement. Rather, this is a case of disagreement. That is, lack of agreement is tolerable, but disagreement is intolerable.

The dialectal variations in Korean fit into this three-way distinction. The mismatching case morphology on AmPs indicates disagreement. The absence of the case morphology on AmPs shows a case of lack of agreement.

However, drawing a conclusion based on matching case morphology on AmPs requires caution. The examples that we have examined so far show that the matching case morphology on AmPs does not mean that AmPs agree with their host DPs. Therefore, I claim that the matching case morphology on AmPs is also an instance of lack of agreement. Then, whether or not disagreement is tolerable determines the dialectal variations. Dialect A tolerates disagreement, in addition to allowing lack of agreement for AmPs. Dialect B, in contrast, allows lack of agreement, but it does not tolerate disagreement.

(25) Amount Phrases

Dialect A:	(Agreement)	√Lack of agreement	√Disagreement
Dialect B:	(Agreement)	√Lack of agreement	*Disagreement

Considering the absence of case morphology as a case of lack of agreement also warrants caution, since ClPs can surface without case morphology in Korean. The observation made so far indicates that ClPs agree with their host DPs, and the case morphology on ClPs provides supporting evidence. Thus, a bare ClP does not indicate lack of agreement.

(26) Classifier Phrases

Dialect A/B:	√Agreement	(Lack of agreement)	*Disagreement

To summarize, ClPs always agree with their host noun, while AmPs exhibit lack of agreement and disagreement. The dialectal difference regarding the mismatching case morphology, thus, comes from whether

an AmP in a dialect exhibits disagreement or lack of agreement.

V. Conclusion and Pedagogical Implications

Classifiers and amount expressions share certain properties. They are, however, different, and that difference has an impact in syntax. Since an agreement relation must be established between a ClP and its host DP in syntax with respect to [number] and [gender] features, the ClP must have the same case morphology as its host DP. In contrast, no such agreement relationship is required for an AmP and its host DP. Since the maximal projection of a passive Voice Head functions as a phase, an agreement relation cannot be established between a ClP and its host noun across the phase. The fact that a ClP must bear the identical case morphology to its host noun, if it bears case morphology, is accounted for. An AmP is not in an agreement relation with its host noun. Thus, it is not subject to the PIC, and it shows the alternation between *-ka* and *-lul*.

How does these semantic and syntactic properties of the split MP structure affect English language acquisition? It is clear that the split MP structure is transferred to the learners' interlanguage at an early stage. At this stage, learners' transfer errors are easily detected. A recognized error can be handled or corrected by instructors. An unnoticed error, however, causes a more serious problem. As was shown in (5) (repeated as (27) below), the advanced students frequently employ a split MP structure.

(27) a. I want to have beer, 2 bottles.
b. We went to the stores, 3 places.
c. I need money, a lot.

Since these utterances are accepted by native speakers, Korean learners of English frequently employ them. It is clear that this type of communication strategy employed in (27) comes from the learners' native language, i.e., from Korean, since the split MP structure that has been explored so far provides the very source of the structure of the sentences in (27). The MPs in (27) show the basic semantic and syntactic properties of the Korean split MP structure. They are used to quantify the relevant domain of their host noun: the volume of beer, the cardinality of stores, and the amount of money. These MPs are c-commanded by its host noun and they are subject to monotonicity constraints. Due to the general lack of case morphology in English, it is not clear whether Korean learners transfer the agreement relation between an MP and its host noun. Nevertheless, the split MP structure is transferred. Furthermore, since this type of utterances are accepted by native speakers, the split MP structure in Korean is used as a strategy to communicate.

A potential hazard of transferring the split MP structure to fulfill the communicative purpose at hand is that it is likely to be fossilized. Vilgil and Oller (1976) claim that fossilized items are deviant expressions in the speech of a learner that receive positive affective feedback and positive cognitive feedback. For example, a native speaker listens to the learner's speech and gives some positive response. In this situation, the split MP structure is likely to be reinforced and ultimately fossilized.

The issue of whether this communication strategy must be corrected or not depends on the general goal of the classroom. In a situation where fluency rather than accuracy is strongly required, this type of communication strategy is likely to be allowed, while in the opposite situation, correction should be provided. Teachers, thus, should be aware of the presence of this type of communication strategy.

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